V&V Reference Report
L2 ASCDS Version : 7.6.7.1

Observation 5595 - L2 Version 002
Chandra X-Ray Center

L2 Processing Date : Mar 31 2006

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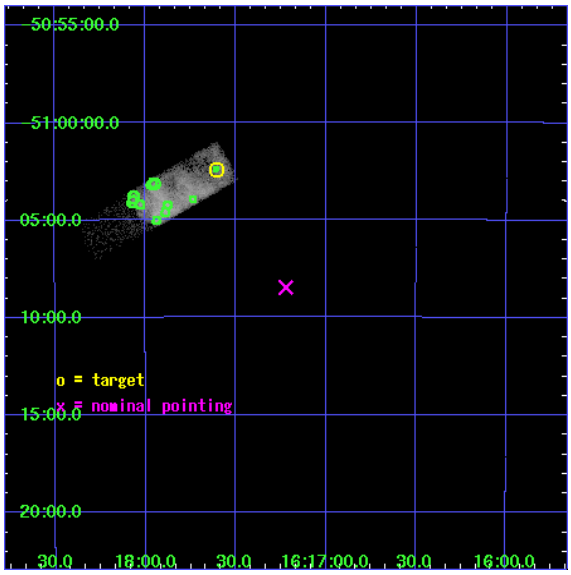
1 Front

seq_num	500584
obs_id	5595
title	Monitoring of the Central Object in RCW103
observer	Professor Gordon Garmire
object	RCW103
dtycycle	0
cycle	P
ra_targ	244.40125
dec_targ	-51.040278
ra_nom	244.30545253808
dec_nom	-51.141172489563
roll_nom	240.18645156753
revision	2
ontime	4684.800069809
livetime	4456.1971557205
ontime3	4684.800069809
l2events	26513

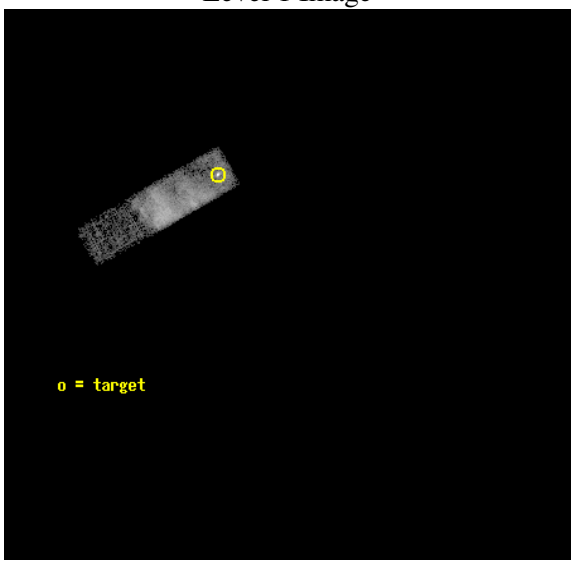


2 OBI

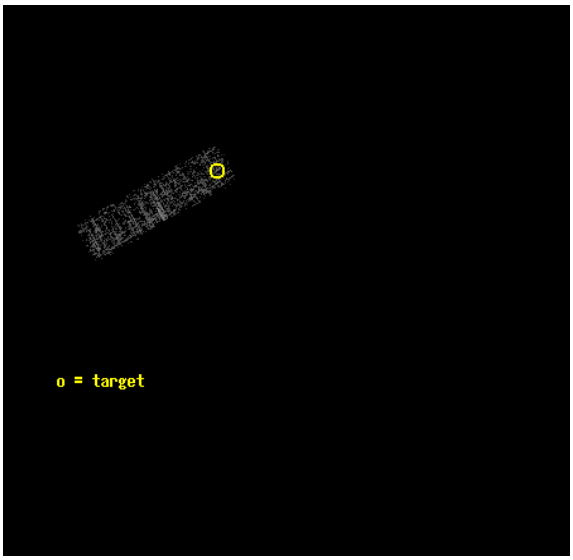
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Bias

Chip 3

2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-03-31T22:49:50
revision	2

sched_exp_time	4500.000000
ontime	5422.967959702
ontime3	5422.967959702
l1events	36880

2.1.4 Events

	ccd 3
level 1 events	36880
rejected events	9391
rejected %	25%

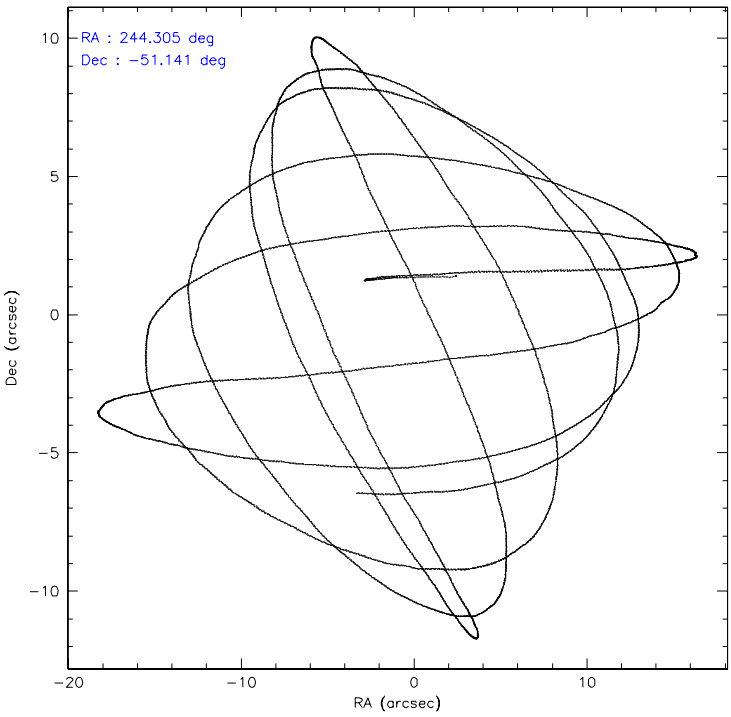
	ccd 3
grade 0 events	24085
	65%
grade 1 events	38
	0%
grade 2 events	2366
	6%
grade 3 events	740
	2%
grade 4 events	713
	1%
grade 5 events	179
	0%
grade 6 events	363
	0%
grade 7 events	8396
	22%

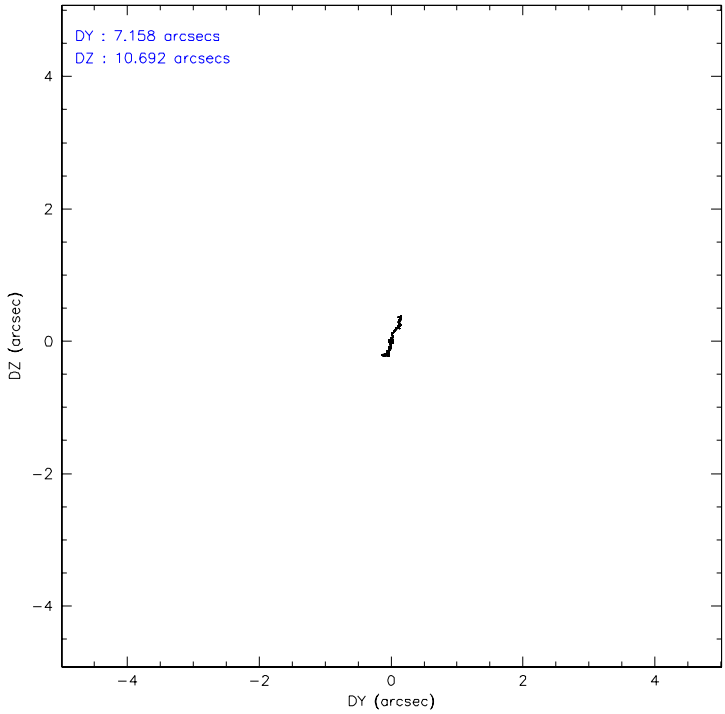
2.2 Compared Parameters

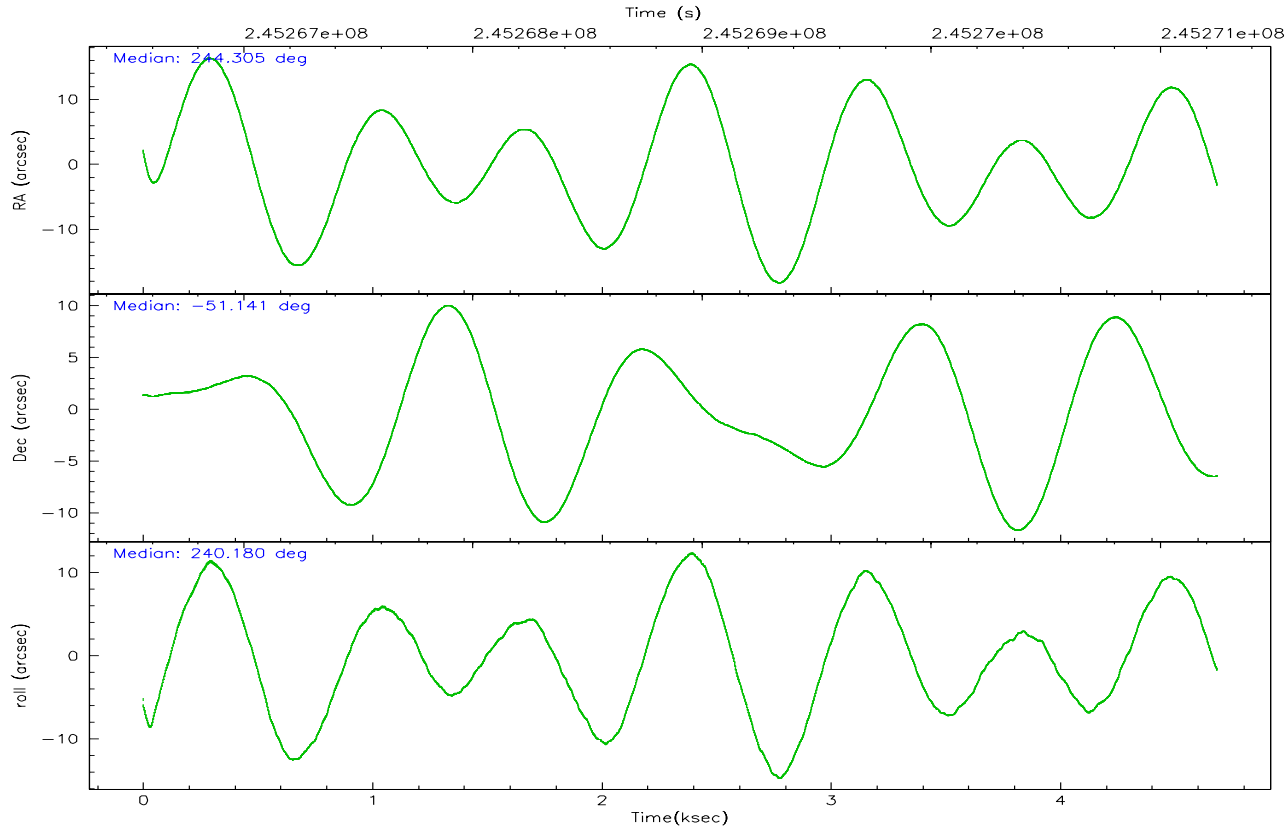
Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-3	ACIS-3
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
Pointing RA	244.304878	244.3054525380768
Pointing Dec	-51.113857	-51.14117248956264
Pointing Roll	239.977336	240.186451567535
SIM focus pos (mm)	-0.782348	-0.7809083437167272
SIM defocus (mm)	0	0.001439871863259334
SIM translation stage pos (mm)	-233.592463	-233.5874344608287
SIM translation stage offset (mm)	0	-0.005018542100998502
Observation start time	245266743.184000	245265736.55868
Observation start date	2005-10-09T17:37:59	2005-10-09T17:22:16
Observation end time	245271243.184000	245272194.05898
Observation end date	2005-10-09T18:52:59	2005-10-09T19:09:54
Read mode	TIMED	TIMED

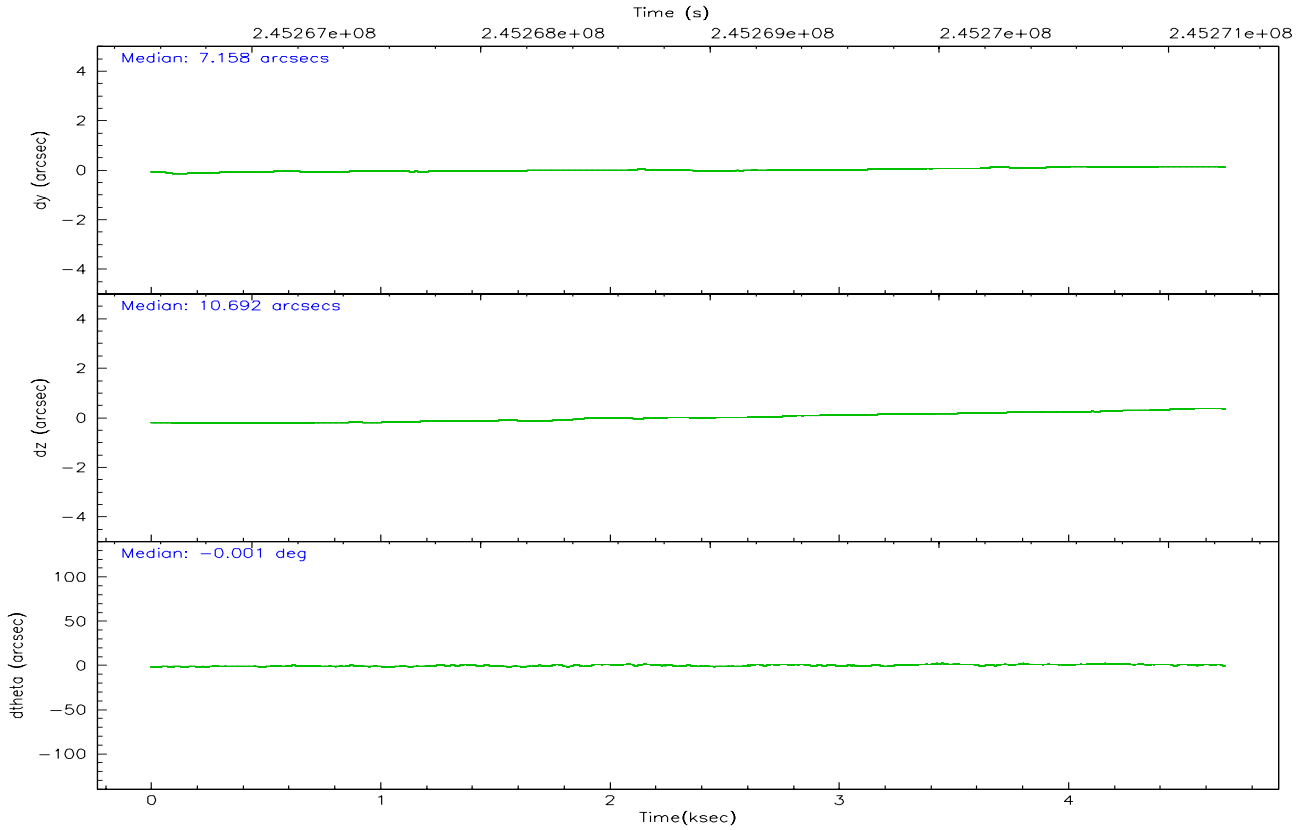
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/4
Subarray start row	1	1
Subarray row count	256	256
Alternating exposures requested	N	N
Primary exposure time	0.000000	0.8

2.3 Aspect


RA : 244.305 deg
Dec : −51.141 deg
Dec (arcsec)
RA (arcsec)
10
5
0
−5
−10
−20
−10
0
10


DY : 7.158 arcsecs
DZ : 10.692 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
2.45267e+08
2.45268e+08
2.45269e+08
2.4527e+08
2.45271e+08
Median: 244.305 deg
RA (arcsec)
Median: −51.141 deg
Dec (arcsec)
Median: 240.180 deg
roll (arcsec)
Time(ksec)

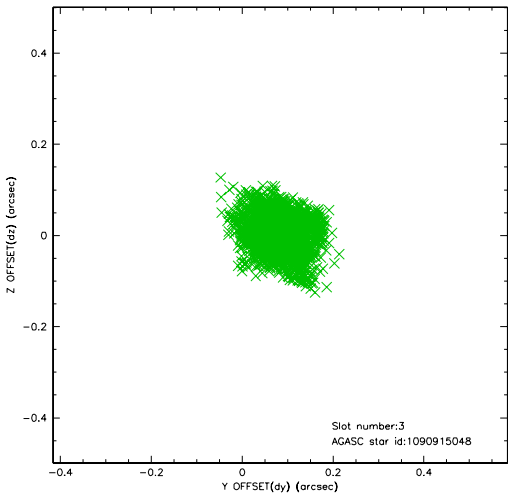

Time (s)
2.45267e+08
2.45268e+08
2.45269e+08
2.4527e+08
2.45271e+08
Median: 7.158 arcsecs
dy (arcsec)
Median: 10.692 arcsecs
dz (arcsec)
Median: −0.001 deg
dtheta (arcsec)
Time(ksec)

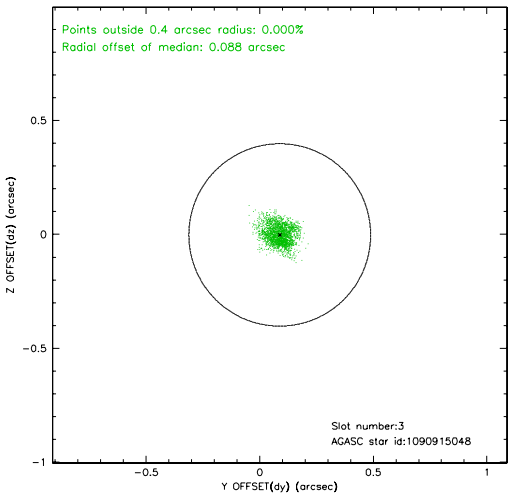
Slot Statistics

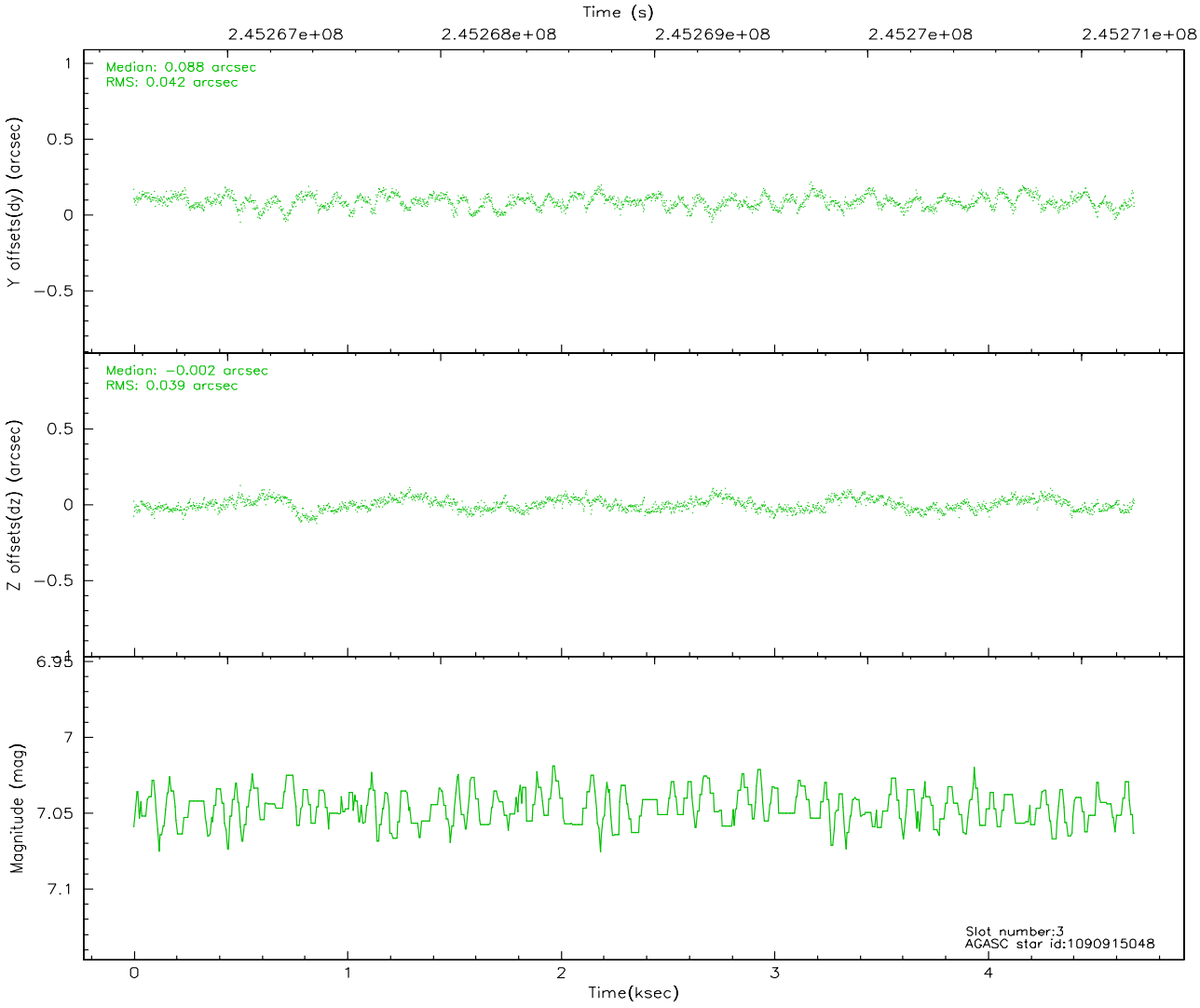
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1143	0.004	0.015	0.013	0.020	0.000000	0.000000	932.50	-834.20
1	FID	ACIS-I-5	7.22	1143	-0.128	0.033	0.013	0.018	0.000000	0.000000	-1814.99	1062.69
2	FID	ACIS-I-6	7.25	1143	0.034	0.022	0.010	0.016	0.000000	0.000000	396.68	1708.64
3	GUIDE	1090915048	7.05	2287	0.088	-0.002	0.061	0.098	242.940674	-51.298495	2137.73	-2311.71
4	GUIDE	1090924096	8.06	2287	0.035	-0.064	0.056	0.090	243.849549	-51.016855	218.23	-1067.11
5	GUIDE	1090924384	8.06	2287	-0.037	-0.005	0.059	0.097	243.330505	-50.934017	559.44	-2231.28
6	GUIDE	1091059112	9.06	2287	-0.030	0.022	0.083	0.131	245.180420	-50.736664	-2162.59	1052.36
7	GUIDE	1090921280	9.09	2284	-0.057	0.048	0.070	0.113	244.365071	-50.638328	-1551.07	-737.29

2.4 Star Slots

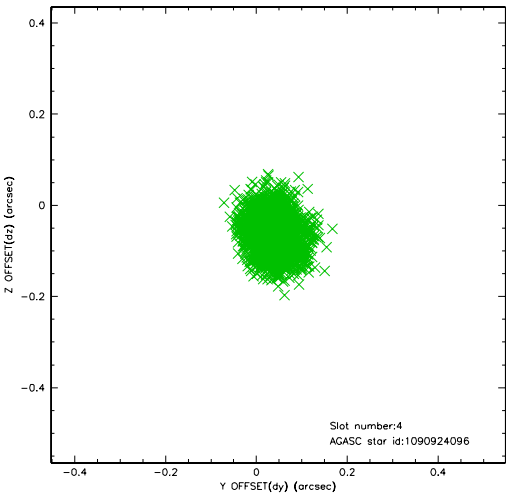
2.4.1 Slot 3

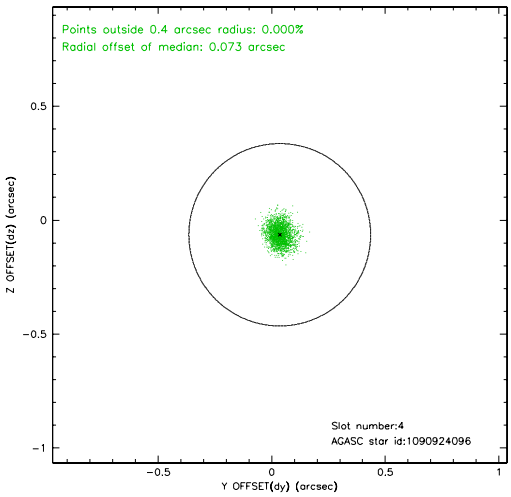


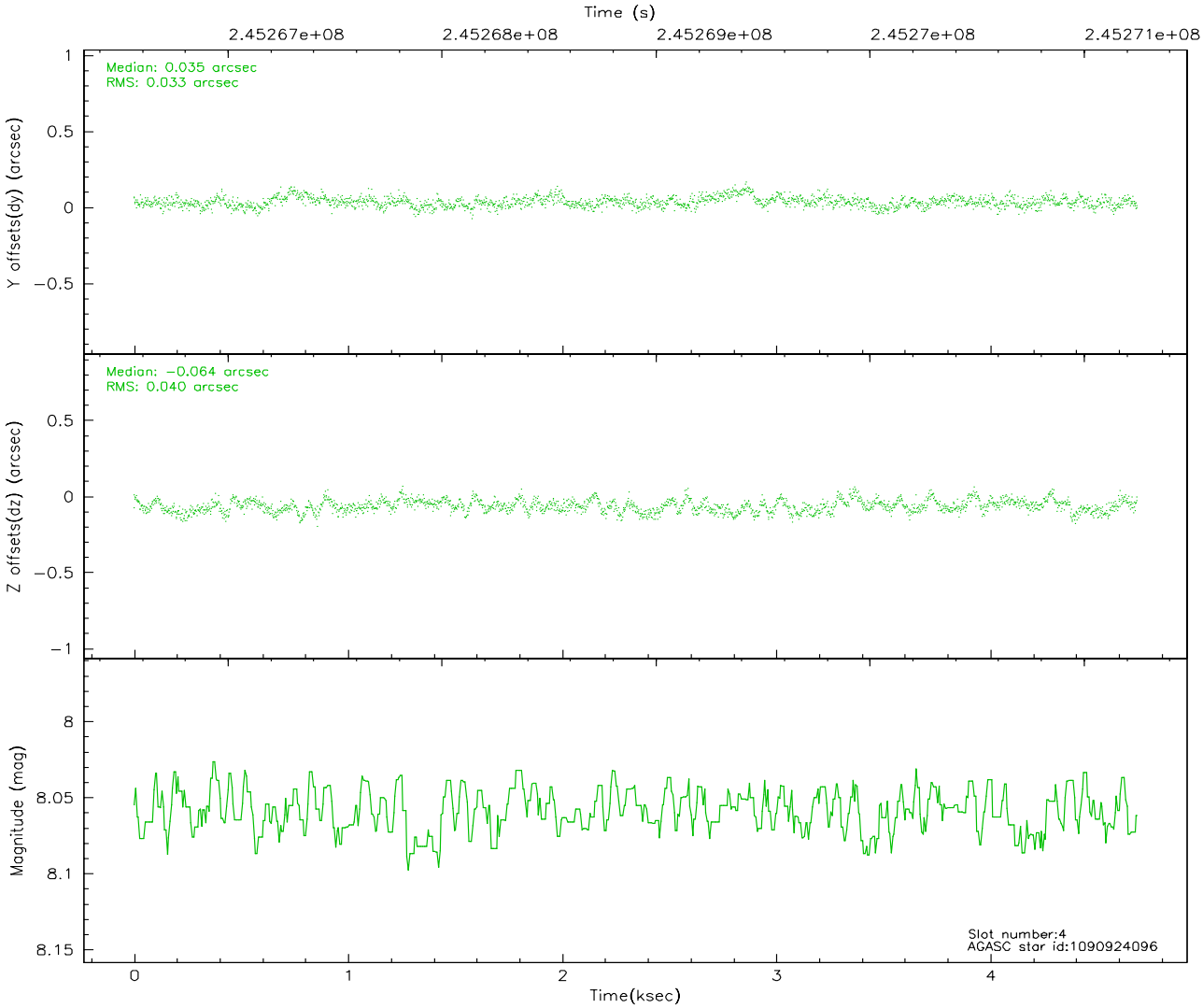




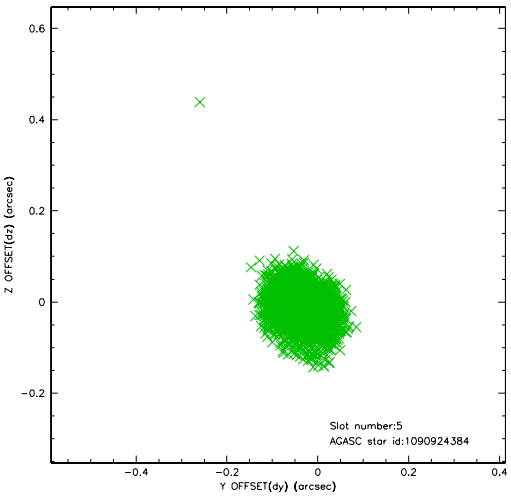
2.4.2 Slot 4

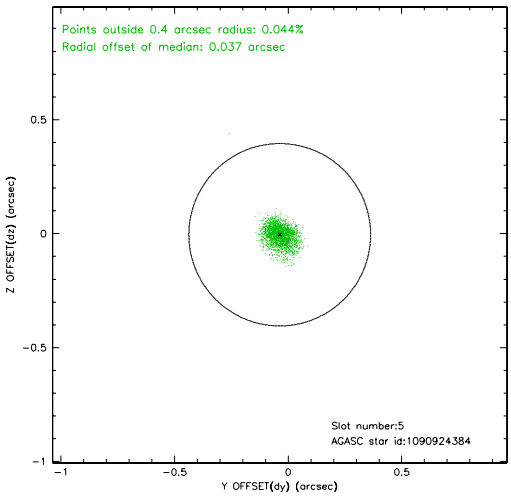

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:1090924096

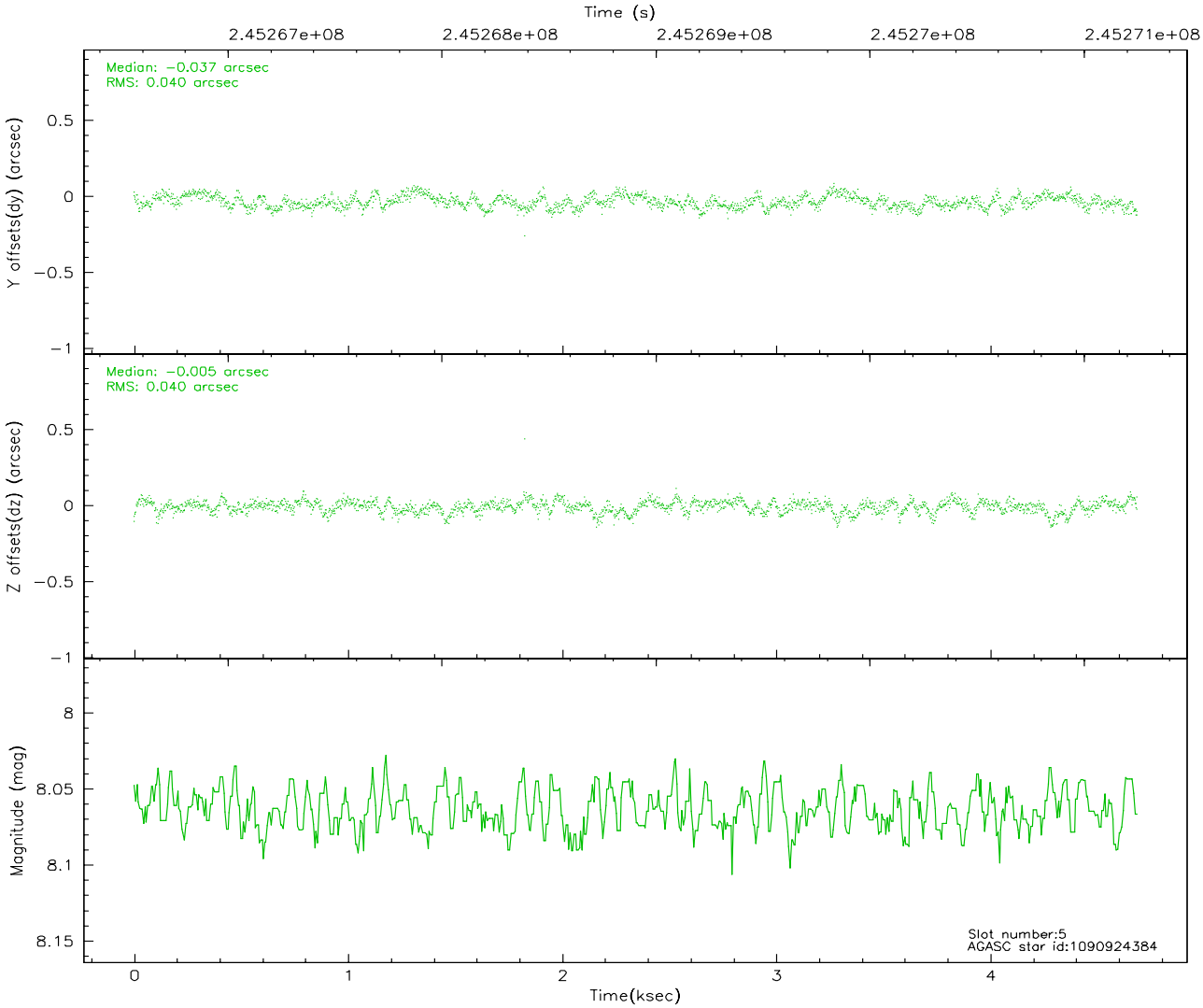

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.073 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:1090924096


Time (s)
2.45267e+08
2.45268e+08
2.45269e+08
2.4527e+08
2.45271e+08
Median: 0.035 arcsec
RMS: 0.033 arcsec
Y offsets(dy) (arcsec)
Median: −0.064 arcsec
RMS: 0.040 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:1090924096
Time(ksec)

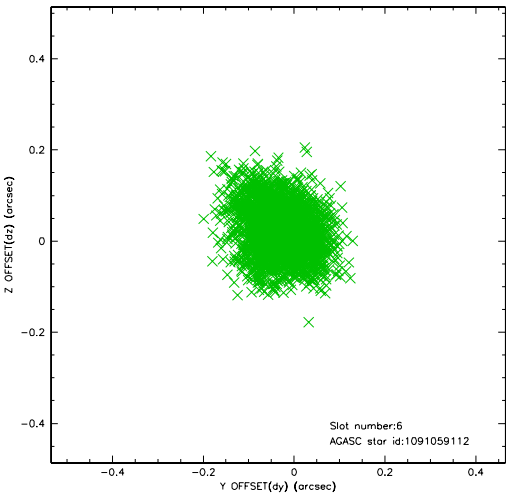
2.4.3 Slot 5

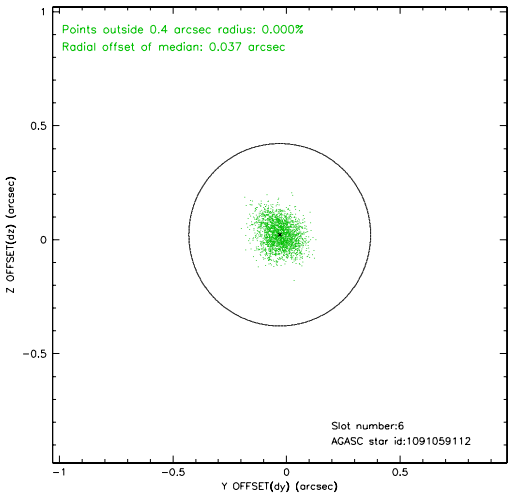

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:1090924384

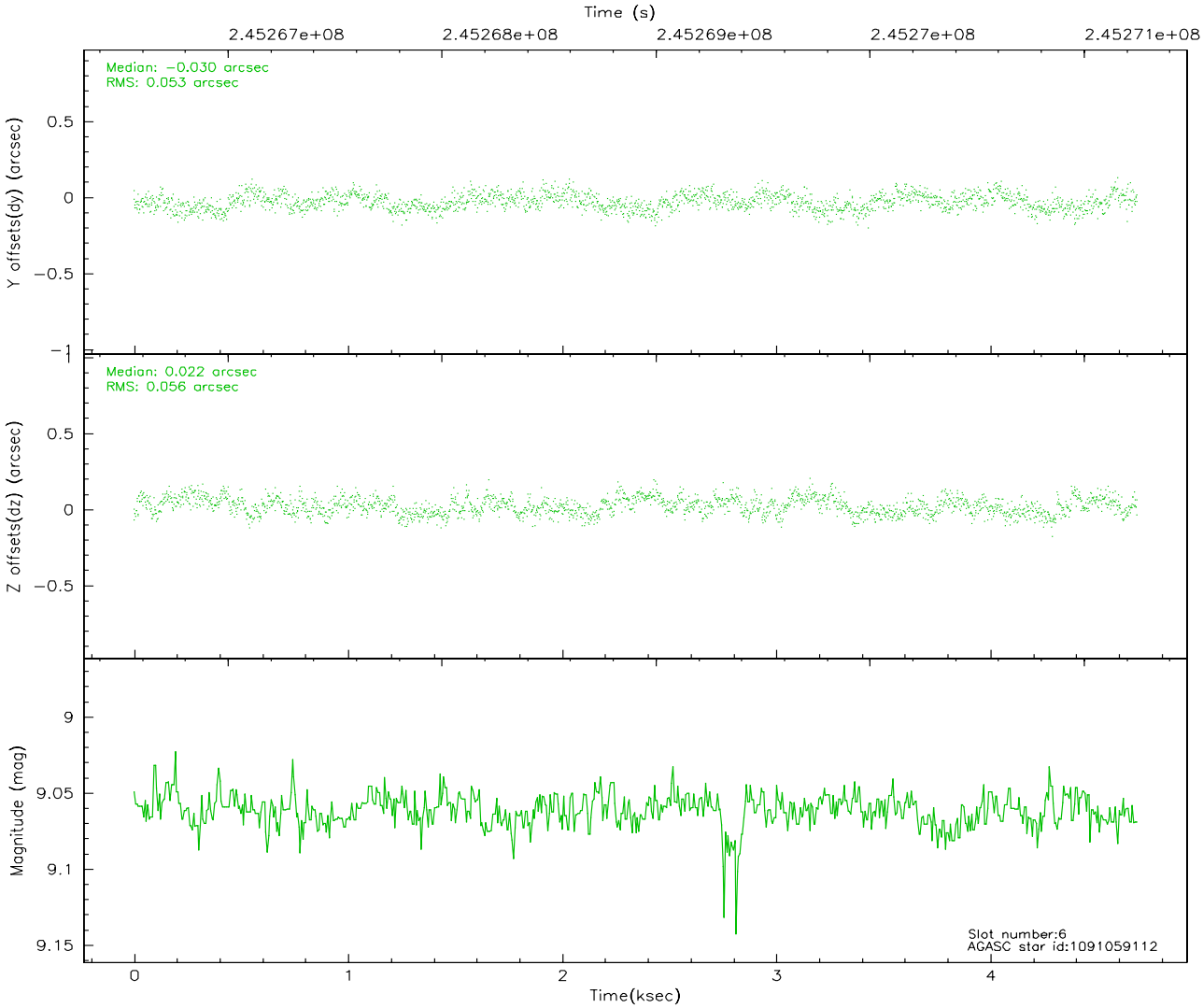

Points outside 0.4 arcsec radius: 0.044%
Radial offset of median: 0.037 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:1090924384


Time (s)
2.45267e+08
2.45268e+08
2.45269e+08
2.4527e+08
2.45271e+08
Median: −0.037 arcsec
RMS: 0.040 arcsec
Y offsets(dy) (arcsec)
Median: −0.005 arcsec
RMS: 0.040 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:1090924384
Time(ksec)

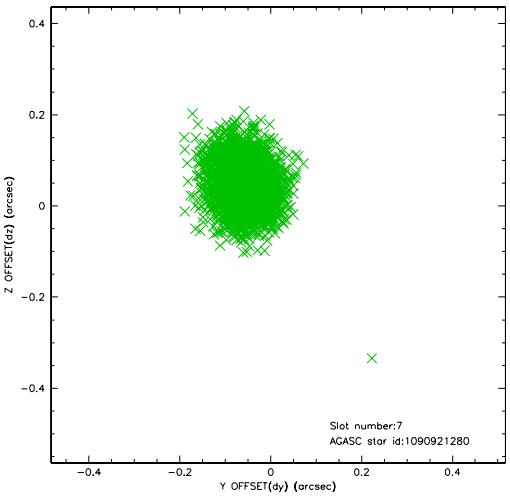
2.4.4 Slot 6

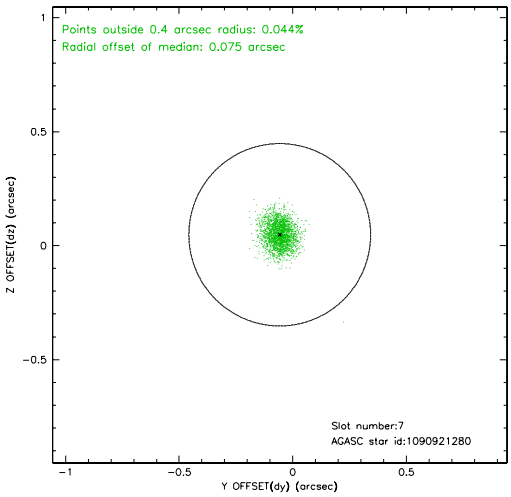

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:1091059112

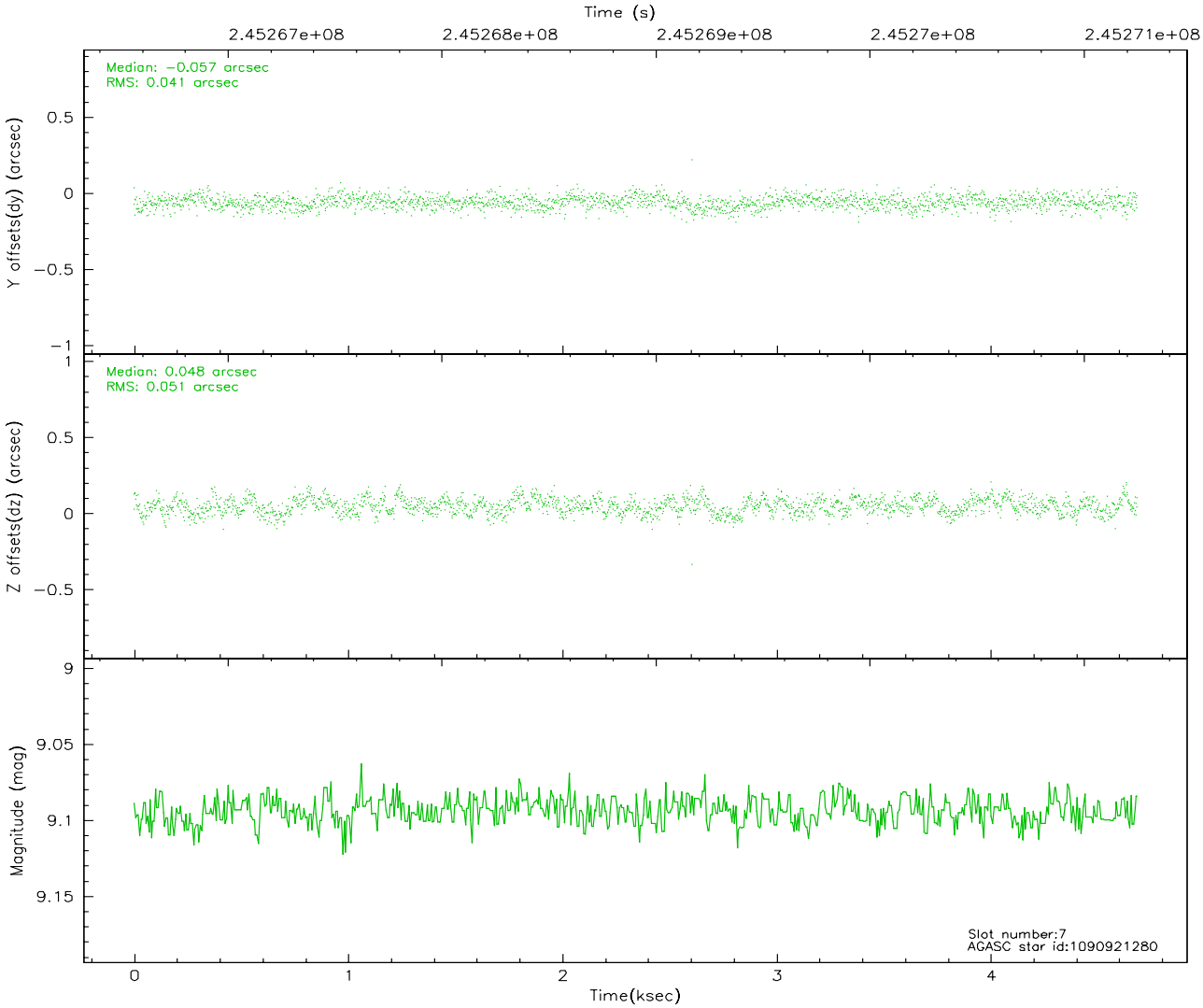

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.037 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:1091059112


Time (s)
2.45267e+08
2.45268e+08
2.45269e+08
2.4527e+08
2.45271e+08
Median: −0.030 arcsec
RMS: 0.053 arcsec
Y offsets(dy) (arcsec)
Median: 0.022 arcsec
RMS: 0.056 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:1091059112
Time(ksec)

2.4.5 Slot 7

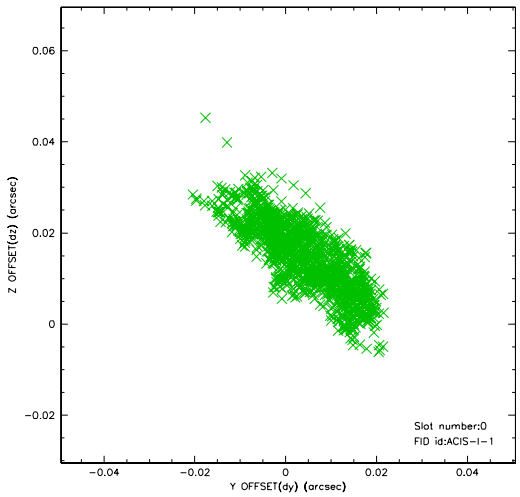

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:1090921280

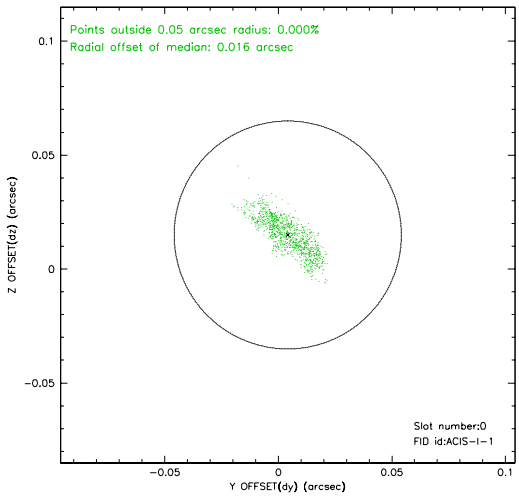

Points outside 0.4 arcsec radius: 0.044%
Radial offset of median: 0.075 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:1090921280

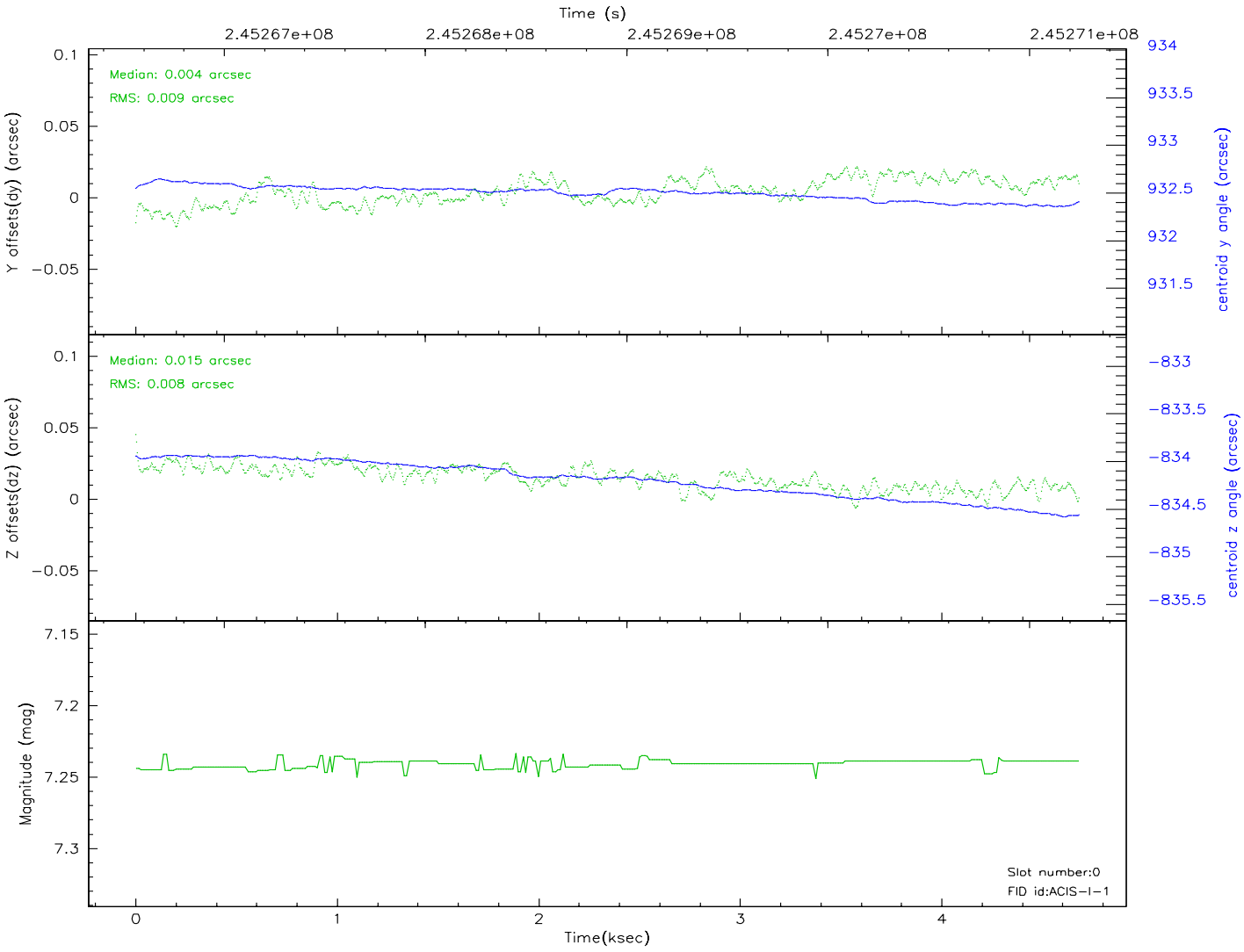

Time (s)
Median: −0.057 arcsec
RMS: 0.041 arcsec
Y offsets(dy) (arcsec)
Median: 0.048 arcsec
RMS: 0.051 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:1090921280
Time(ksec)

2.5 FID Slots

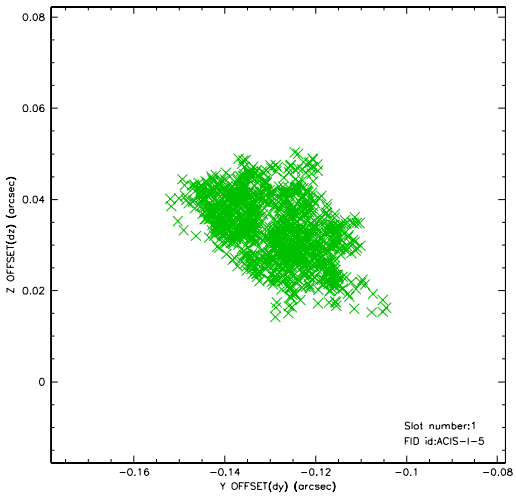
2.5.1 Slot 0

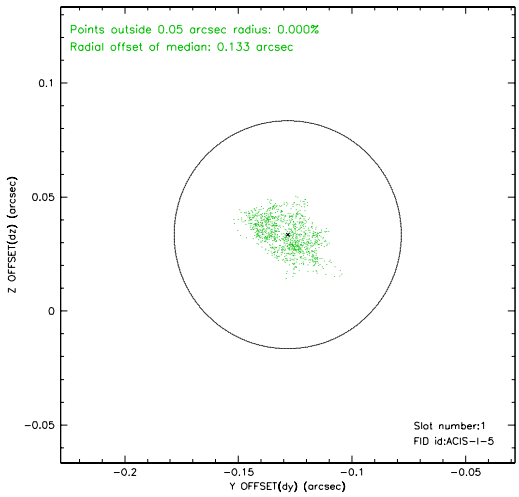


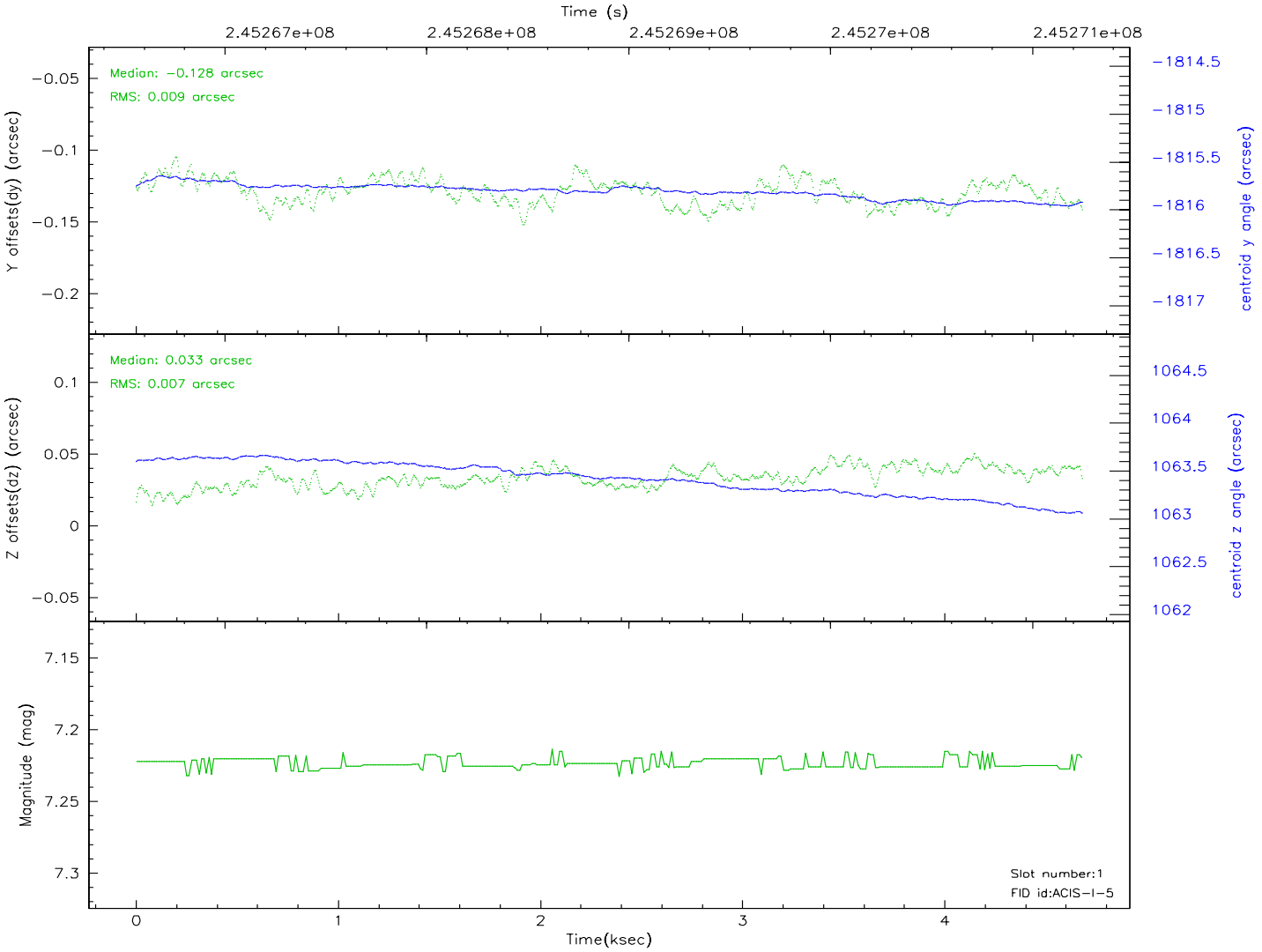




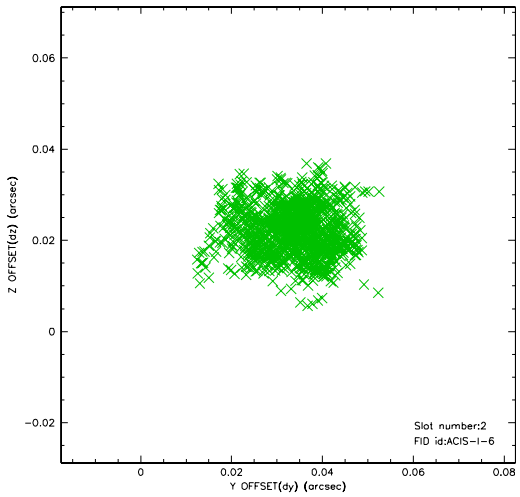
2.5.2 Slot 1

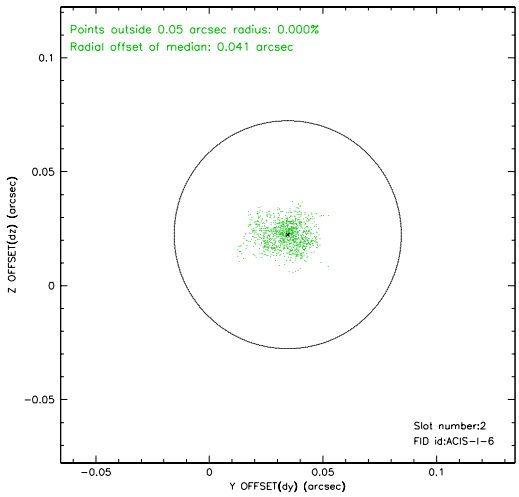

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-I-5

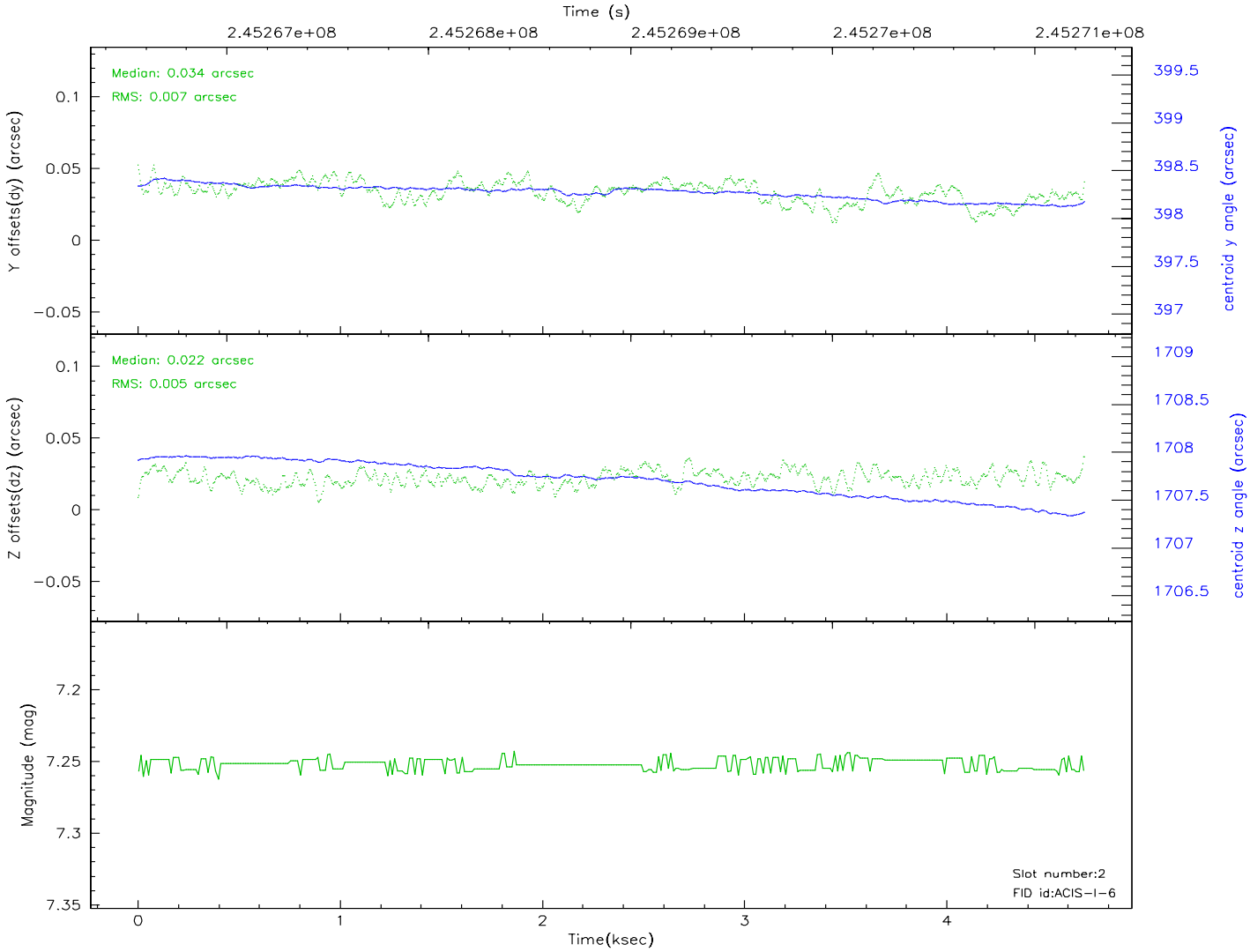

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.133 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-I-5


Time (s)
Median: -0.128 arcsec
RMS: 0.009 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.033 arcsec
RMS: 0.007 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:ACIS-I-5
Time(ksec)

2.5.3 Slot 2

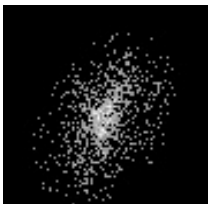

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:ACIS-I-6


Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.041 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:ACIS-I-6


Time (s)
2.45267e+08
2.45268e+08
2.45269e+08
2.4527e+08
2.45271e+08
Median: 0.034 arcsec
RMS: 0.007 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.022 arcsec
RMS: 0.005 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:ACIS-I-6
Time(ksec)

3 Point Sources

7.04 arcmin



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.6848

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. GOs should subtract 1.3 degrees from the reported temperature to determine the true temperature.

Monitor constraint met.